

ABSTRACT OF THE DISCLOSURE

An antenna coupling apparatus, an external-antenna connecting apparatus, and an onboard external-antenna connecting apparatus which inhibits unnecessary power emissions, reduces transmission loss, and offers high durability and high ease of operation. An antenna coupling apparatus has an electromagnetic coupling element consisting of a conductor that is ~~non-contact~~ ^{not in contact} with a first antenna with respect to DC components and a ground conductor element consisting of a conductor that is ~~non-contact~~ ^{not in contact} with the first antenna with respect to DC components and in contact with a ground conductor with respect to DC components and reflecting the power transmitted or received by the first antenna toward the electromagnetic coupling element. An external-antenna connecting apparatus and an onboard external-antenna connecting apparatus have an electromagnetic coupling circuit in their bodies that electromagnetically couples the antenna of a portable radio terminal and an external antenna, with the external-antenna connecting apparatus and the onboard external-antenna connecting apparatus, being ~~non-contact~~ ^{not in contact} with the portable radio terminal with respect to DC components, when the portable radio terminal is secured in the bodies.